

**Journal of Combinatorial Theory, Series A***Editor-in-Chief*

S. Ole Warnaar  
 Department of Mathematics  
 The University of Queensland  
 Brisbane, Australia

*Advisory Board*

Hélène Barcelo  
 Department of Mathematics  
 Arizona State University  
 Tempe, Arizona 85287-1804

Charles J. Colbourn  
 Department of Computer Science & Engineering  
 Arizona State University  
 PO Box 875406  
 Tempe, Arizona 85287

Bernard Leclerc  
 Laboratoire de Mathématiques 'Nicolas Oresme'  
 Université de Caen  
 F-14032 Caen Cedex, France

Dhruv Mubayi  
 Department of Mathematics, Statistics, and  
 Computer Science (m/c 249)  
 University of Illinois at Chicago  
 851 S. Morgan Street, Chicago, IL 60607-7045

Gilles Schaeffer  
 Laboratoire d'Informatique (LIX)  
 École Polytechnique  
 91128 Palaiseau Cedex, France

Volkmar Welker  
 Fachbereich Mathematik und Informatik  
 Philipps-Universität Marburg  
 35032 Marburg, Germany

*Founding Editors:* Frank Harary<sup>†</sup> and Gian-Carlo Rota<sup>†</sup>

**Publication information:** *Journal of Combinatorial Theory, Series A* (ISSN 0097-3165) is published monthly (except March, June, September, and December) by Elsevier (Radarweg 29, 1043 NX Amsterdam, The Netherlands). Further information on this journal is available from the Publisher, from the Regional Sales Office nearest you, or from this journal's website (<http://www.elsevier.com/locate/jcta>). Information on other Elsevier products is available through Elsevier's website (<http://www.elsevier.com>). Periodicals postage paid at Rahway, NJ 07065-9998, USA, and at additional mailing offices. **USA POSTMASTER:** Send change of address to *Journal of Combinatorial Theory, Series A*, Elsevier, Customer Service Department, 11830 Westline Industrial Drive, St. Louis, MO 63146-3313, USA.

**Orders, claims, and journal inquiries:** please contact the Elsevier Customer Service Department nearest you:

**St. Louis:** Elsevier Customer Service Department, 3251 Riverport Lane, Maryland Heights, MO 63043, USA; phone: (877) 8397126 [toll free within the USA]; (+1) (314) 4478878 [outside the USA]; fax: (+1) (314) 4478077; e-mail: [JournalCustomerService-usa@elsevier.com](mailto:JournalCustomerService-usa@elsevier.com)

**Oxford:** Elsevier Customer Service Department, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK; phone: (+44) (1865) 843434; fax (+44) (1865) 843970; e-mail: [JournalsCustomerServiceEMEA@elsevier.com](mailto:JournalsCustomerServiceEMEA@elsevier.com)

**Tokyo:** Elsevier, Customer Service Department, 4F Higashi-Azabu, 1-Chome Bldg., 1-9-15 Higashi-Azabu, Minato-ku, Tokyo 106-0044, Japan; phone: (+81) (3) 5561 5037; fax: (+81) (3) 5561 5047; e-mail: [JournalsCustomerServiceJapan@elsevier.com](mailto:JournalsCustomerServiceJapan@elsevier.com)

**Singapore:** Elsevier, Customer Service Department, 3 Killiney Road, #08-01 Winsland House I, Singapore 239519; phone: (+65) 63490222; fax: (+65) 67331510; e-mail: [JournalsCustomerServiceAPAC@elsevier.com](mailto:JournalsCustomerServiceAPAC@elsevier.com)

**Author inquiries:** For inquiries relating to the submission of articles (including electronic submission where available), please visit this journal's homepage at <http://www.elsevier.com/locate/jcta>. You can track accepted articles at <http://www.elsevier.com/trackarticle> and set up e-mail alerts to inform you of when an article's status has changed. Also accessible from here is information on copyright, frequently asked questions, and more. For detailed instructions on the preparation of electronic artwork, please visit <http://www.elsevier.com/artworkinstructions>. Contact details for questions arising after acceptance of an article, especially those relating to proofs, will be provided by the publisher.

**Advertising information:** Advertising orders and inquiries may be sent to Janine Castle, Elsevier Ltd., The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK; phone: (+44) 1865 843 844; fax: (+44) 1865 853 973; e-mail: [j.castle@elsevier.com](mailto:j.castle@elsevier.com). Customers in the USA and Canada may also contact Tino DeCarlo, Advertising Department, Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710, USA; phone: (+1) (212) 633 3815; fax: (+1) (212) 633 3820; e-mail: [t.decarlo@elsevier.com](mailto:t.decarlo@elsevier.com).

Printed in the United States of America

☉ The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper)